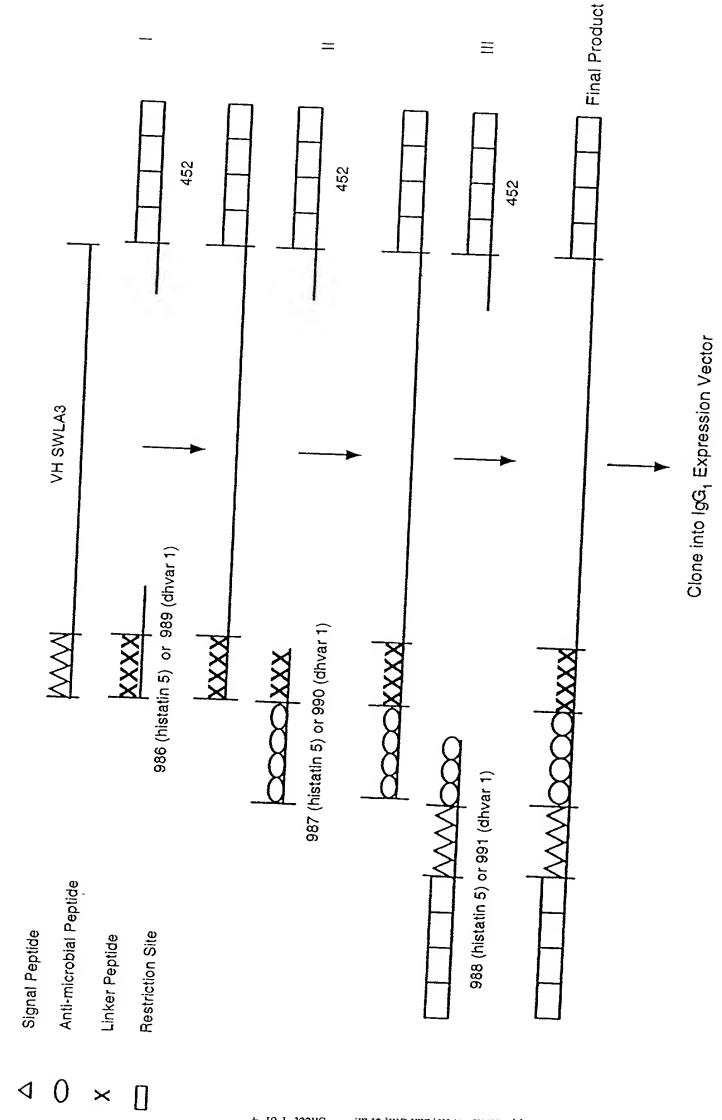
FIG. 1

Sequential PCR Reactions: Addition of Fusion Protein Gene Components to VH SWLA3



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FIG. 2

Primers used in Sequential PCR Reactions:

- 986 (SEQ ID NO: 7) 5' CAC CAC TCG CAC AGA GGA TAC TCT GGT GGC GGT GGC TCG GGC GGA GGT GGG TCG GGC GGA TCC GAC GTG AAG CTT GTG GAG TC 3'
- 987 (SEQ ID NO: 8) 5' GGT GTC CAG TGT GAT AGC CAC GCT AAG CGG CAC CAC GGA TAT AAG CGG AAG TTC CAC GAG AAG CAC CAC TCG CAC AGA GGA TAC 3'
- 988 (SEQ ID NO: 9) 5' G GATATC CACC ATG GAC TTC GGG TTG AGC TTG GTT TTC CTT GTC CTT ACT TTA AAA GGT GTC CAG TGT GAT AGC C 3'
- 989 (SEQ ID NO: 10) 5' G TTC AGC CTG CGC AAG TAC TCT GGT GGC GGT GGC TCG GGC GGA GGT GGG TCG GGC GGC GGA TCC GAC GTG AAG CTT GTG GAG TC 3'
- 990 (SEQ ID NO: 11) 5' GTC CTT ACT TTA AAA GGT GTC CAG TGT AAG CGG CTG TTT AAG GAG CTC AAG TTC AGC CTG CGC AAG TAC 3'
- 991 (SEQ ID NO: 12) 5' G GATATC CACC ATG GAC TTC GGG TTG AGC TTG GTT TTC CTT GTC CTT ACT TTA AAA GGT GTC CAG 3'
- 452 (SEQ ID NO: 13) 5' TGG GTC GAC WGA TGG GGS TGT TGT GCT AGC TGA GGA GAC 3'

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FIG. 3

Histatin 5 Fusion to VH SWLA3: DNA and Amino Acid Sequence

ggatatccac catggacttc gggttgagct tggttttcct tgtccttact ttaaaaggtg tccagtgt gat age cae get aag egg cae cae gga tat aag egg aag tte cae gag aag cae cae teg Asp Ser His Ala Lys Arg His His Gly Tyr Lys Arg Lys Phe His Glu Lys His His Ser cac aga gga tac tot ggt ggc ggt ggc tog ggc gga ggt ggg tog ggt ggc gga toc His Arg Gly Tyr Ser Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser gac gtg aag ctt gtg gag tct ggg gga ggc tta gtg aac cct gga ggg tcc ctg aaa ctc Asp Val Lys Leu Val Glu Ser Gly Gly Leu Val Asn Pro Gly Gly Ser Leu Lys Leu tee tgt gea gee tet gga tte act tte agt age tat ace atg tet tgg gtt ege cag act Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr Thr Met Ser Trp Val Arq Gln Thr ccg gag aag agg ctg gag tgg gtc gca tcc att agt agt ggt ggt act tac acc tac tat Pro Glu Lys Arg Leu Glu Trp Val Ala Ser Ile Ser Ser Gly Gly Thr Tyr Thr Tyr cca gac agt gtg aag ggc cga ttc acc atc tcc aga gac aat gcc aag aac acc ctg tac Pro Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Leu Tyr ctg caa atg acc agt ctg aag tct gag gac aca gcc atg tat tac tgt tca aga gat gac Leu Gln Met Thr Ser Leu Lys Ser Glu Asp Thr Ala Met Tyr Tyr Cys Ser Arg Asp Asp ggc tcc tac ggc tcc tat tac tat gct atg gac tac tgg ggt caa gga acc tca gtc acc Gly Ser Tyr Gly Ser Tyr Tyr Tyr Ala Met Asp Tyr Trp Gly Gln Gly Thr Ser Val Thr gtc tct tca gct agc Val Ser Ser Ala Ser

FIG. 4

Dhvar 1 Fusion to VH SWLA3: DNA and Amino Acid Sequence

ggatatccac catggacttc gggttgagct tggttttcct tgtccttact ttaaaaggtg tccagtgt aag cgg ctg ttt aag gag ctc aag ttc agc ctg cgc aag tac tct ggt ggc ggt ggc tcg Lys Arg Leu Phe Lys Glu Leu-Lys Phe Ser Leu Arg Lys Tyr Ser Gly Gly Gly Ser tta gtg aac cct gga ggg tcc ctg aaa ctc tcc tgt gca gcc tct gga ttc act ttc agt Leu Val Asn Pro Gly Gly Ser Leu Lys Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser age tat ace atg tet tgg gtt ege eag act eeg gag aag agg etg gag tgg gte gea tee Ser Tyr Thr Met Ser Trp Val Arg Gln Thr Pro Glu Lys Arg Leu Glu Trp Val Ala Ser att agt agt ggt ggt act tac acc tac tat cca gac agt gtg aag ggc cga ttc acc atc Ile Ser Ser Gly Gly Thr Tyr Thr Tyr Pro Asp Ser Val Lys Gly Arg Phe Thr Ile tcc aga gac aat gcc aag aac acc ctg tac ctg caa atg acc agt ctg aag tct gag gac Ser Arg Asp Asn Ala Lys Asn Thr Leu Tyr Leu Gln Met Thr Ser Leu Lys Ser Glu Asp aca qcc atg tat tac tqt tca aga gat gac qqc tcc tac qgc tcc tat tac tat qct atg Thr Ala Met Tyr Tyr Cys Ser Arg Asp Asp Gly Ser Tyr Gly Ser Tyr Tyr Ala Met gac tac tgg ggt caa gga acc tca gtc acc gtc tct tca gct agc Asp Tyr Trp Gly Gln Gly Thr Ser Val Thr Val Ser Ser Ala Ser

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Promoter Terminator V_{L} α-factor intein CBD intein peptide Linker V_{H} Linker CH3 Transcription **mRNA Translation** a-factor intein-CBD peptide Linker Linker CH3 V_L V_{H} Secretion and purification Self cleavage **Folding** Linker Antimicrobial peptide **Dimerization** Linker

Minibody-peptide fusion protein